

REMARKS

By the above amendment, the specification and abstract have been amended to utilize terminology as found in the claims, such that the objection to the specification and the objection to the drawings should now be overcome, as will be discussed below. Additionally, even though the claims have not been objected to, informalities in claims 2 and 8-10 have been corrected, noting that claim 2 has been amended to be more properly in dependent form, and the preamble portion of claims 8-10 have been amended to correspond to that of the parent claims. Also, a new independent claim 16 reciting additional features, as will be discussed below, has been presented.

Turning to the objection to the drawings and to the specification with regard to the feature of "setting portion", by the present amendment, page 22 of the specification has been amended to point out that the shaft 103 as illustrated in Fig. 10(b) serves at a setting portion of the optical disk 15 which is an optical information medium. Accordingly, the terminology as now utilized in the specification of "setting portion" provides antecedent basis for such claimed feature, and the objection to the drawings and the specification with regard thereto should now be overcome.

Furthermore, by the present amendment, page 18 of the specification has been amended to utilize the terminology of alignment direction of the semiconductor laser chips and alignment direction of the optical spots. Reference is made to the attached Sketch I of Fig. 1 of the drawings of this application, which has been annotated to show the aforementioned features. In this regard, as clearly illustrated in Fig. 1 and as described in the specification of this application at page 17, for example, the tracking servo direction is shown by the double headed arrow 14. On the other hand, as described in the paragraph bridging pages 17 and 18 of the specification, the mount surface for the laser chips 2 for mounting the laser chips 4a and 4b is substantially perpendicular to the tracking servo direction 14 and as

illustrated in the attached Sketch I representing an annotated version of Fig. 1, the direction of alignment of the laser chips 4a and 4b as represented by the double headed arrow also is substantially perpendicular to the tracking servo direction 14. Moreover, as described, the semiconductor laser chip 4a emits a laser beam 6a and the semiconductor laser chip 4b emits a laser beam 6b which are focused as respective optical spots on the optical medium or optical disk 15 as indicated by the dots representing the spot along the track 17. Hereagain, the optical spots of the laser beams 6a and 6b on the optical disk 15 have an alignment direction as represented by the double headed arrow shown in Sketch I which is substantially perpendicular to the tracking servo direction 14. Thus, applicants submit that the specification and drawings clearly disclose the claimed features of independent claims 1 and 6 as well as new independent claim 16 which recites the feature of the direction of alignment of the optical spots as being substantially perpendicular to the tracking servo direction 14. Applicants note that with these features, even though a focusing lens is moved to control tracking, only small optical efficiency variations occur, as represented by curves 55a and 55b of Fig. 5(e) of the drawings of this application, thereby achieving stable recording with small variation of recording power as described at page 4, lines 15-23 and page 23, line 19 to page 26, line 15 of the specification, for example. Applicants submit that the features as recited in independent claims 1, 6 and 16 are not disclosed or taught in the cited art, as will become clear from the following discussion.

The rejection of claims 1 and 6 under 35 U.S.C. 102(e) as being anticipated by Kajiyama et al, U.S. Patent No. 6,522,990 and the rejection of claims 2-5 and 7-10 under 35 U.S.C. 103(a) as being unpatentable over Kajiyama et al, U.S. Patent No. 6,522,990 in view of Uchizaki et al, U.S. Patent No. 6,646,975, such rejections are traversed insofar as they are applicable to the present claims, and reconsideration and withdrawal of the rejections are respectfully requested.

At the outset, as to the requirements to support a rejection under 35 U.S.C. 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

With regard to the requirements to support a rejection under 35 U.S.C. 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under §103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an

obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

In applying Kajiyama et al to claims 1 and 6, the Examiner contends that this patent discloses "a direction of alignment of said plurality of semiconductor laser chips is substantially perpendicular to the tracking servo direction (See col. 9, lines 1-20; Fig. 2.2, 4)". Irrespective of this position by the Examiner, applicants submit that Kajiyama et al discloses that the direction of alignment of the plurality of chips 1a and 1b is substantially parallel to the tracking servo direction, and not substantially perpendicular to the tracking servo direction as recited in claims 1 and 6. Applicants submit that the substantially parallel relationship is evident from the attached Sketch II representing Fig. 2 of Kajiyama et al, annotated to show the servo tracking direction and the direction of alignment of the semiconductor chips 1a and 1b. That is, as described in col. 9, lines 11-13 of Kajiyama et al, the semiconductor laser 1 is positioned such that the direction of k2-k3 corresponds to the direction of tracking (the radial direction) of the optical disk, and as pointed out in col. 9, lines 5-

8, laser chips 1a and 1b are arranged on an imaginary line between notches k2 and k3, such that the direction of alignment of the semiconductor chips represents the direction of the imaginary line between notches k2 and k3 which corresponds to the direction of tracking so that a substantially parallel relationship is obtained as clearly disclosed in this patent. Likewise, col. 9, lines 8-11 of Kajiyama et al, indicate that the spots which are formed by laser beams from laser chips 1a and 1b on signal recording surface 9a or 99a are symmetrically arranged on either side of the track. Thus, such spots necessarily extend or are aligned in the radial direction of the optical disk in a manner corresponding to the servo tracking direction, and hereagain Kajiyama et al provide a substantially parallel relationship contrary to the claimed features of new claim 16 which provides "a direction of alignment of the optical spots formed on the optical information medium is substantially perpendicular to the tracking servo direction" (emphasis added). Thus, applicants submit that irrespective of the position set forth by the Examiner, Kajiyama et al does not disclose in the sense of 35 U.S.C. 102 or teach in the sense of 35 U.S.C. 103 the recited features of independent claims 1, 6 and 16 of this application and such claims and therewith the dependent claims patentably distinguish over Kajiyama et al and should be considered allowable at this time.

With respect to the combination of Kajiyama et al and Uchizaki et al, applicants note that the Examiner attempts to utilize Uchizaki et al to overcome recognized deficiencies of Kajiyama et al with respect to dependent claims. However, irrespective of the features contended by the Examiner to be present in Uchizaki et al, applicants note that this patent also fails to disclose or teach the substantially perpendicular relationship of the alignment direction of the semiconductor laser chips to the tracking servo direction, and the direction of alignment of the optical spots on the optical medium being substantially perpendicular to the tracking servo direction. Rather, Uchizaki et al, as illustrated in

the attached Sketch II representing Fig. 2A of this patent and annotated in a manner similar to that of the other annotations, provides the same relationship as provided by Kajiyama et al, i.e. a substantially parallel relationship, and does not disclose or teach the substantially perpendicular relationship as recited in independent claims 1, 6 and 16 of this application. Thus, it is apparent that Uchizaki et al fails to overcome the above-noted deficiencies of Kajiyama et al and applicants submit that the proposed combination fails to provide the claimed features as set forth in independent claims 1, 6 and 16 of this application. As such, applicants submit that the independent and dependent claims of this application patentably distinguish over this proposed combination of references in the sense of 35 U.S.C. 103 and should be considered allowable thereover.

Applicants note that with respect to the features of dependent claims 2-5 and 7-10, applicants submit that contrary to the position set forth by the Examiner, Uchizaki et al do not disclose the recited features of the dependent claims and it cannot be considered obvious to combine the same with Kajiyama et al in the sense of 35 U.S.C. 103, recognizing that the proposed combination does not provide the claimed features of independent claims 1, 6 and 16 as pointed out above. Applicants note that the cited art does not obtain stable recording because of varying of the optical utilizing efficiency caused by movement of the focusing lens, whereas, as described in the specification of this application, the claimed configuration as set forth in independent claims 1, 6 and 16 enables a stable recording due to little variation of optical utilizing efficiency even though the focusing lens moves. Thus, applicants submit that the independent and dependent claims of this application patentably distinguish over this proposed combination of references in the sense of 35 U.S.C. 103, and should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that all claims present in this application should now be in condition for allowance, and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (500.40513X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



Melvin Kraus

Registration No. 22,466

ANTONELLI, TERRY, STOUT & KRAUS, LLP

MK/cee
(703) 312-6600